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10/553,346	10/14/2005	Kenji Sakamoto	1248-0825PUS1	2091

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EXAMINER	
INGVOLDSTAD, BENNETT	

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
09/16/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/553,346	SAKAMOTO, KENJI	
	Examiner	Art Unit	
	Bennett Ingvoldstad	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-14,16-23 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-14,16-23 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 26 June 2008 have been fully considered, but are moot in view of the new rejections.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, 9-14, 16-23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura (US 5883621) in view of Karlquist (US 2004/0203435), further in view of Haines (US 2003/0063589).

Claim 1: Iwamura discloses a display device (integrated receiver decoder 100 in conjunction with TV set 102 [Fig 1]), comprising:

- reception means for receiving data transmitted [...] from a plurality of transmission devices (IRD 100 receives data from DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]);
- display means for displaying information (TV set 102 [Fig 1]); and

- control means for controlling a function of the display device (IRD 100 outputs received signals to the display [Figs 2a,b]), wherein the control means includes:
- reception state detection means for detecting a state of reception of the reception means (network reception connections are discovered upon startup and when a new node joins the network [Fig 3] [col. 4, l. 55 – col. 5, l. 50]); and
- display control means for controlling the display means so that the display means displays images respectively indicating the plurality of transmission devices, based on the state of reception detected by the reception state detection means (the connected transmission devices are displayed as icons on a screen [Fig 6] [col. 1, l. 64 – col. 2, l. 7]).

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means, or, consequently, that the detected degree is displayed as claimed.

Karlquist discloses a wireless data transmission method for transmitting data between devices [0006]. Karlquist further discloses a mapping method for discovering the network topology [0018] which has an equivalent result as the network mapping discovery method disclosed by Iwamura [Fig 3 and description]. Karlquist further discloses a degree detection means for detecting a degree of reception (a quality of service metric [0006]).

Thus one of ordinary skill would have been able to have substituted the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Karlquist because both transmission methods create a network topology mapping for displaying the networked devices (as in Iwamura Fig 6). Therefore the simple substitution of one transmission method for the other would have been obvious to one of ordinary skill because of the equivalency of the transmission methods. The wireless transmission method further provides benefits such as increased device mobility due to lack of wires.

However, Iwamura in view of Karlquist still does not disclose that the display mapping displays the device images according to the degree of the reception for each device.

Haines discloses a wireless network mapping method that determines a distance between wireless devices based on a degree of reception [Abstract] so that users may more easily identify the location of networked devices to interact with the networked devices [0003]. Haines further contemplates displaying a network mapping, wherein the mapping indicates the relative distances of the devices [0041], and thus displays the device "images for respectively indicating the plurality of transmission devices in a form according to the degree of reception detected by the reception degree detection means", due to the distances being based on the degree of reception [Abstract].

It would have been obvious to have enhanced the network mapping method disclosed by Iwamura in view of Karlquist with the teaching of Haines' network

mapping method for the purpose of generating a more accurate network topology that takes distance into account, thus enabling users to more easily identify which device they are interacting with (e.g., which VCR is being used [Iwamura Fig 12]) by generating a topology superimposed on a map [Haines 0041].

Claim 2, dependent on claim 1: Iwamura in view of Karlquist and Haines further discloses wherein the reception state detection means detects the state of reception, based on at least one of electric field strength of a received radio wave and an error ratio of received data (received signal strength or bit error rate used to map the network reception connections [Karlquist 0006] [Haines 0005]).

Claim 3: Iwamura discloses a display device (integrated receiver decoder 100 in conjunction with TV set 102 [Fig 1]), comprising:

- communication means for performing [...] communication of data with each of a plurality of communication devices (IRD 100 receives data from DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]);
- display means for displaying information (TV set 102 [Fig 1]); and
- control means for controlling a function of the display device (IRD 100 outputs received signals to the display [Figs 2a,b]),
- wherein the control means includes:
- communication state detection means for detecting a state of communication of the communication means (network communication

connections are discovered upon startup and when a new node joins the network [Fig 3] [col. 4, l. 55 – col. 5, l. 50]); and

- display control means for controlling the display means so that the display means displays images respectively indicating the plurality of communication devices, based on the state of communication detected by the communication state detection means (the connected transmission devices are displayed as icons on a screen [Fig 6] [col. 1, l. 64 – col. 2, l. 7]).

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means, or, consequently, that the detected degree is displayed as claimed.

Karlquist discloses a wireless data transmission method for transmitting data between devices [0006]. Karlquist further discloses a mapping method for discovering the network topology [0018] which has an equivalent result as the network mapping discovery method disclosed by Iwamura [Fig 3 and description]. Karlquist further discloses a degree detection means for detecting a degree of reception (a quality of service metric [0006]).

Thus one of ordinary skill would have been able to have substituted the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Karlquist because both transmission methods create a network topology mapping for displaying the networked devices (as in Iwamura Fig 6). Therefore the simple substitution of one transmission method for the other

would have been obvious to one of ordinary skill because of the equivalency of the transmission methods. The wireless transmission method further provides benefits such as increased device mobility due to lack of wires.

However, Iwamura in view of Karlquist still does not disclose that the display mapping displays the device images according to the degree of the reception for each device.

Haines discloses a wireless network mapping method that determines a distance between wireless devices based on a degree of reception [Abstract] so that users may more easily identify the location of networked devices to interact with the networked devices [0003]. Haines further contemplates displaying a network mapping, wherein the mapping indicates the relative distances of the devices [0041], and thus displays the device "images for respectively indicating the plurality of transmission devices in a form according to the degree of reception detected by the reception degree detection means", due to the distances being based on the degree of reception [Abstract].

It would have been obvious to have enhanced the network mapping method disclosed by Iwamura in view of Karlquist with the teaching of Haines' network mapping method for the purpose of generating a more accurate network topology that takes distance into account, thus enabling users to more easily identify which device they are interacting with (e.g., which VCR is being used [Iwamura Fig 12]) by generating a topology superimposed on a map [Haines 0041].

Claim 4, dependent on claim 3: Iwamura in view of Karlquist and Haines further discloses wherein the communication degree detection means detects the degree of communication, based on at least one of electric field strength of a received radio wave, an error ratio of received data (received signal strength or bit error rate used to map the network communication connections [Karlquist 0006] [Haines 0005]), and frequency of a request for re-transmission of data based on the error ratio.

Claim 5, dependent on claim 3: Iwamura in view of Karlquist and Haines further discloses wherein the display control means determines a distance from the display device, based on the degree of communication detected by the communication degree detection means [Haines Abstract], and controls the display means so that the display means displays the images respectively indicating the plurality of communication devices, based on the determined distance [Haines 0041].

Claim 6, dependent on claim 5: I Iwamura in view of Karlquist and Haines further discloses wherein the display control means controls the display means so that the display means displays according to perspective (a map perspective [Haines 0041]).

Claim 7, dependent on claim 3: Iwamura in view of Karlquist and Haines further discloses wherein the communication degree detection means detects a degree of communication with communication device(s) with which a communication link is established, out of the plurality of communication devices (a displayed distance [Haines 0041] is based on a degree of reception [Haines Abstract]).

Claim 9, dependent on claim 3: Iwamura in view of Karlquist and Haines discloses storage means for storing information regarding rooms in which the plurality of communication devices are placed (for storing a map of the building in relation to device locations [Haines 0041]),
wherein the display control means performs display control, so as to display an image for indicating each of the rooms (a building map [Haines 0041]), based on a degree of communication of communication device(s) placed in each of the rooms, out of the degree of communication detected by the communication degree detection means (based on distance which is determined by communication signal strength [Haines 0006]).

Claim 10: Iwamura discloses a [...] communication system made by connecting one or more communication devices with a display device so that the one or more communication devices can [...] communicate with the display device (DVD 106, VCRs 108, 112, minidisk recorder 110 communicate with display device 102 via IRD 100 [Fig 1]), wherein:

- the one or more communication devices include communication means for performing [...] communication of data with the display device [Fig 1], and
- control means for controlling a function of the one or more communication devices (controlling playback from a device [Fig 11]);
- the display device (IRD 100 in conjunction with TV 102 [Fig 1]) includes
- communication means for performing [...] communication of data with the one or more communication devices (1394 interface [Fig 2b]),
- display means for displaying and outputting information (analog video output [Fig 2b), and
- control means for controlling a function of the display device (cpu 312 [Fig 2b]) ;
- the control means of the one or more communication devices includes
- communication state detection means for detecting a state of communication of the communication means (detecting an active communication connection and displaying it via arrows 925 [Fig 12]), and
- communication state transmission means for transmitting, via the communication means, to the display device, the state of communication detected by the communication state detection means (in order to display active communication arrows 925 [Fig 12]); and
- the control means of the display device includes communication state acquisition means for acquiring, via the communication means, the state of communication detected by the communication state detection means

of the one or more communication devices (in order to display active communication arrows 925 [Fig 12]), and

- display control means for controlling the display means so that the display means displays an image or images indicating the one or more communication devices, based on the state of communication acquired by the communication state acquisition means (displaying active communication arrows 925 [Fig 12]).

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means, or, consequently, that the detected degree is displayed as claimed.

Karlquist discloses a wireless data transmission method for transmitting data between devices [0006]. Karlquist further discloses a mapping method for discovering the network topology [0018] which has an equivalent result as the network mapping discovery method disclosed by Iwamura [Fig 3 and description]. Karlquist further discloses a degree detection means for detecting a degree of reception (a quality of service metric [0006]).

Thus one of ordinary skill would have been able to have substituted the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Karlquist because both transmission methods create a network topology mapping for displaying the networked devices (as in Iwamura Fig 6). Therefore the simple substitution of one transmission method for the other would have been obvious to one of ordinary skill because of the equivalency of

the transmission methods. The wireless transmission method further provides benefits such as increased device mobility due to lack of wires.

However, Iwamura in view of Karlquist still does not disclose that the display mapping displays the device images according to the degree of the reception for each device.

Haines discloses a wireless network mapping method that determines a distance between wireless devices based on a degree of reception [Abstract] so that users may more easily identify the location of networked devices to interact with the networked devices [0003]. Haines further contemplates displaying a network mapping, wherein the mapping indicates the relative distances of the devices [0041], and thus displays the device "images for respectively indicating the plurality of transmission devices in a form according to the degree of reception detected by the reception degree detection means", due to the distances being based on the degree of reception [Abstract].

It would have been obvious to have enhanced the network mapping method disclosed by Iwamura in view of Karlquist with the teaching of Haines' network mapping method for the purpose of generating a more accurate network topology that takes distance into account, thus enabling users to more easily identify which device they are interacting with (e.g., which VCR is being used [Iwamura Fig 12]) by generating a topology superimposed on a map [Haines 0041].

Claim 11, dependent on claim 10: Iwamura in view of Karlquist and Haines further discloses wherein the communication degree detection means of the one or more communication devices detect the degree of communication, based on at least one of electric field strength of a received radio wave, an error ratio of received data (received signal strength or bit error rate used to map the network communication connections [Karlquist 0006] [Haines 0005]), and frequency of a request for re-transmission of data based on the error ratio.

Claim 12, dependent on claim 10: Iwamura in view of Karlquist and Haines further discloses wherein the display control means determines a distance from the display device, based on the degree of communication detected by the communication degree detection means [Haines Abstract], and controls the display means so that the display means displays the images respectively indicating the plurality of communication devices, based on the determined distance [Haines 0041].

Claim 13, dependent on claim 12: Iwamura in view of Karlquist and Haines further discloses wherein the display control means controls the display means so that the display means displays according to perspective (a map perspective [Haines 0041]).

Claim 14, dependent on claim 10: Iwamura in view of Karlquist and Haines further discloses wherein the communication degree acquisition means of the display acquires a degree of communication with communication device(s) with which a communication link is established, out of the one or more communication devices (a displayed distance [Haines 0041] is based on a degree of reception [Haines Abstract]).

Claim 16, dependent on claim 10: Iwamura in view of Karlquist and Haines discloses storage means for storing information regarding rooms in which the plurality of communication devices are placed (for storing a map of the building in relation to device locations [Haines 0041]),
wherein the display control means performs display control, so as to display an image for indicating each of the rooms (a building map [Haines 0041]), based on a degree of communication of communication device(s) placed in each of the rooms, out of the degree of communication detected by the communication degree detection means (based on distance which is determined by communication signal strength [Haines 0006]).

Claim 17, dependent on claim 10: Iwamura in view of Karlquist and Haines further discloses wherein there are a plurality of the communication devices (DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]),

- the communication means of each of the communication devices performs wireless communication of data with other communication device(s) as well as with the display device (communication between devices 900 and 903 as well as between device 904 and display device 905/906 [Fig 12]),
- the communication degree detection means of each of the communication devices detects a degree of communication with other communication device(s) as well as with the display device [Karlquist 0006] [Haines 0005],
- the display control means of the display device controls the display means so that the display means displays the images respectively indicating the communication devices, based on the degree of communication of the communication devices acquired by the communication degree acquisition means [Haines 0041].

Claim 18, dependent on claim 10: Iwamura in view of Karlquist and Haines further discloses wherein there are a plurality of the communication devices (DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]),

- the communication means of each of the communication devices performs wireless communication of data with other communication device(s) as well as with the display device (communication between devices 900 and 903 as well as between device 904 and display device 905/906 [Fig 12]),

- the communication degree detection means of each of the communication devices detects a degree of communication with other communication device(s) [Karlquist 0006] [Haines 0005],
- the display device further includes communication degree detection means for detecting a degree of communication with each of the communication devices [Karlquist 0006] [Haines 0005], and
- the display control means controls the display means so that the display means displays the images for indicating the communication devices, based on (i) the degree of communication of each of the communication devices acquired by the communication degree acquisition means and (ii)the degree of communication with each of the communication devices detected by the communication degree detection means [Karlquist 0006] [Haines 0005].

Claim 19: Iwamura discloses a control method of a display device including:

- reception means for receiving data transmitted [...] from a plurality of transmission devices (IRD 100 receives data from DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]); and display means for displaying information (TV 102 [Fig 1]),
- wherein said display device detects a state of reception of the reception means, and displays images respectively indicating the plurality of transmission devices, based on the detected state of reception [Fig 12].

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means, or, consequently, that the detected degree is displayed as claimed.

Karlquist discloses a wireless data transmission method for transmitting data between devices [0006]. Karlquist further discloses a mapping method for discovering the network topology [0018] which has an equivalent result as the network mapping discovery method disclosed by Iwamura [Fig 3 and description]. Karlquist further discloses a degree detection means for detecting a degree of reception (a quality of service metric [0006]).

Thus one of ordinary skill would have been able to have substituted the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Karlquist because both transmission methods create a network topology mapping for displaying the networked devices (as in Iwamura Fig 6). Therefore the simple substitution of one transmission method for the other would have been obvious to one of ordinary skill because of the equivalency of the transmission methods. The wireless transmission method further provides benefits such as increased device mobility due to lack of wires.

However, Iwamura in view of Karlquist still does not disclose that the display mapping displays the device images according to the degree of the reception for each device.

Haines discloses a wireless network mapping method that determines a distance between wireless devices based on a degree of reception [Abstract] so

that users may more easily identify the location of networked devices to interact with the networked devices [0003]. Haines further contemplates displaying a network mapping, wherein the mapping indicates the relative distances of the devices [0041], and thus displays the device "images for respectively indicating the plurality of transmission devices in a form according to the degree of reception detected by the reception degree detection means", due to the distances being based on the degree of reception [Abstract].

It would have been obvious to have enhanced the network mapping method disclosed by Iwamura in view of Karlquist with the teaching of Haines' network mapping method for the purpose of generating a more accurate network topology that takes distance into account, thus enabling users to more easily identify which device they are interacting with (e.g., which VCR is being used [Iwamura Fig 12]) by generating a topology superimposed on a map [Haines 0041].

Claim 20: Iwamura discloses a control method of a display device including: communication means for performing [...] communication of data with each of a plurality of communication devices (IRD 100 receives data from DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]); and display means for displaying information (TV 102 [Fig 1]),
wherein said display device detects a state of communication of the communication means, and displays images respectively indicating the plurality

of communication devices, based on the detected state of communication [Fig 12].

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means, or, consequently, that the detected degree is displayed as claimed.

Karlquist discloses a wireless data transmission method for transmitting data between devices [0006]. Karlquist further discloses a mapping method for discovering the network topology [0018] which has an equivalent result as the network mapping discovery method disclosed by Iwamura [Fig 3 and description]. Karlquist further discloses a degree detection means for detecting a degree of reception (a quality of service metric [0006]).

Thus one of ordinary skill would have been able to have substituted the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Karlquist because both transmission methods create a network topology mapping for displaying the networked devices (as in Iwamura Fig 6). Therefore the simple substitution of one transmission method for the other would have been obvious to one of ordinary skill because of the equivalency of the transmission methods. The wireless transmission method further provides benefits such as increased device mobility due to lack of wires.

However, Iwamura in view of Karlquist still does not disclose that the display mapping displays the device images according to the degree of the reception for each device.

Haines discloses a wireless network mapping method that determines a distance between wireless devices based on a degree of reception [Abstract] so that users may more easily identify the location of networked devices to interact with the networked devices [0003]. Haines further contemplates displaying a network mapping, wherein the mapping indicates the relative distances of the devices [0041], and thus displays the device "images for respectively indicating the plurality of transmission devices in a form according to the degree of reception detected by the reception degree detection means", due to the distances being based on the degree of reception [Abstract].

It would have been obvious to have enhanced the network mapping method disclosed by Iwamura in view of Karlquist with the teaching of Haines' network mapping method for the purpose of generating a more accurate network topology that takes distance into account, thus enabling users to more easily identify which device they are interacting with (e.g., which VCR is being used [Iwamura Fig 12]) by generating a topology superimposed on a map [Haines 0041].

Claim 21: Iwamura discloses a control method of a wireless communication system made by connecting one or more communication devices with a display device so that the one or more communication devices can [...] communicate with the display device (IRD 100 receives data from DVD 106, VCRs 108, 112, minidisk recorder 110 [Fig 1]), wherein:

- the one or more communication devices include communication means for performing [...] communication of data with the display device [Fig 1],
- the display device includes communication means for performing [...] communication of data with the one or more communication devices [Fig 1], and display means for displaying information (TV 102 [Fig 1]),
- said [...] communication system detects a state of communication of communication means of the one or more communication devices, transmits the detected state of communication from the one or more communication devices to the display device, and displays an image or images indicating the one or more communication devices on display means of the display device, based on the transmitted state of communication [Fig 12].

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means, or, consequently, that the detected degree is displayed as claimed.

Karlquist discloses a wireless data transmission method for transmitting data between devices [0006]. Karlquist further discloses a mapping method for discovering the network topology [0018] which has an equivalent result as the network mapping discovery method disclosed by Iwamura [Fig 3 and description]. Karlquist further discloses a degree detection means for detecting a degree of reception (a quality of service metric [0006]).

Thus one of ordinary skill would have been able to have substituted the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Karlquist because both transmission methods create a network topology mapping for displaying the networked devices (as in Iwamura Fig 6). Therefore the simple substitution of one transmission method for the other would have been obvious to one of ordinary skill because of the equivalency of the transmission methods. The wireless transmission method further provides benefits such as increased device mobility due to lack of wires.

However, Iwamura in view of Karlquist still does not disclose that the display mapping displays the device images according to the degree of the reception for each device.

Haines discloses a wireless network mapping method that determines a distance between wireless devices based on a degree of reception [Abstract] so that users may more easily identify the location of networked devices to interact with the networked devices [0003]. Haines further contemplates displaying a network mapping, wherein the mapping indicates the relative distances of the devices [0041], and thus displays the device "images for respectively indicating the plurality of transmission devices in a form according to the degree of reception detected by the reception degree detection means", due to the distances being based on the degree of reception [Abstract].

It would have been obvious to have enhanced the network mapping method disclosed by Iwamura in view of Karlquist with the teaching of Haines' network

mapping method for the purpose of generating a more accurate network topology that takes distance into account, thus enabling users to more easily identify which device they are interacting with (e.g., which VCR is being used [Iwamura Fig 12]) by generating a topology superimposed on a map [Haines 0041].

Claim 22, dependent on claim 1: Iwamura in view of Karlquist and Haines further discloses a computer readable medium encoded with a display device control program for causing the display device as set forth in claim 1 to function and for causing a computer to function as the control means (program running on display processor).

Claim 23, dependent on claim 1: Iwamura in view of Karlquist and Haines further discloses a computer readable medium encoded with a wireless communication system control program for causing a wireless communication system as set forth in claim 10 to function,and for causing a computer to function as control means for both of the communication device and the display device (program running on wireless network interface [Karquist 0006] connected to IRD 100 [Iwamura Fig 1]).

Claim 25, dependent on claim 3: Iwamura in view of Karlquist and Haines discloses a computer readable medium encoded with a display device control program for causing the display device as set forth in claim 3 to function and for

causing a computer to function as the control means (program running on display processor).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Ingvoldstad whose telephone number is (571)270-3431. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bennett Ingvoldstad/
Examiner, Art Unit 2623

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2623